



Amendments to the Abstract

Please delete the presently-filed Abstract.

Please add a new Abstract as follows:

A<sup>2</sup>

An all-lag correlator is provided that correlates a received spread-spectrum signal with a reference code and produces at each sampling instance  $N$  correlation lags corresponding to the correlation of the received signal with 0, 1, ...,  $N-1$  lags (or delays) of the reference code, wherein  $N$  is the length of the reference code. The correlator includes a spread spectrum signal storage means, subtraction means, multiplication means, correlation lag storage means and addition means configured such that a correlation lag for a present sampling instance is based on a correlation lag of a previous sampling instance.